

2011 ESD Publications (Accepted, In Press, Published)

The following lists include those documents (journal articles, books, book chapters, conference papers, reports) associated with the Earth Sciences Division that changed their publication status from “submitted/in review” to “accepted” (“in press”), or that were published (and have a completed citation), during the period from January 1, 2011, through the present.

ESD Peer-Reviewed Journal Articles, Books, and Book Chapters for 2011 (to date)

1. Ali, S., M. Stute, T. Torgersen, G. Winckler, and B.M. Kennedy (2011), Helium measurements of pore-fluids obtained from SAFOD drillcore. *Hydrogeology Journal*, 19 (1), 237–247; published online, DOI:10.1007/s10040-010-0645-6. LBNL-3690E.
2. Armstrong, R., and J. Ajo-Franklin (2011), Investigating biomineralization using synchrotron based x-ray computed microtomography. *Geophysical Research Letters*, 38, L08406; published online, DOI: 10.1029/2011GL046916. LBNL-4754E.
3. Atlas, R., and T.C. Hazen (2011), Oil biodegradation and bioremediation: A tale of the two worst spills in U.S. history. *Environmental Science & Technology*, published online, DOI: 10.1021/es2013227.
4. Ballantyne, A.P., P.A. Baker, J.Q. Chambers, R. Villalba, and J. Argollo (2011), Regional differences in South American monsoon precipitation inferred from the growth and isotopic composition of tropical trees. *Earth Interactions*, 15 (5); published online, DOI: 10.1175/2010EI277.1.
5. Beller, H. R., T. C. Legler, and S. R. Kane. (2011) Genetic manipulation of the obligate chemolithoautotrophic bacterium *Thiobacillus denitrificans*. In: *Microbial Systems Biology: Methods and Protocols* [Methods in Molecular Biology series] (in press), Humana.
6. Berryman, J.G. (2011), Mechanics of layered anisotropic poroelastic media with applications to effective stress for fluid permeability. *International Journal of Engineering Science*, 49 (1), 122–139; published online, DOI:10.1016/j.ijengsci.2010.06.027). LBNL-3589E.
7. Berryman, J.G. (2011), Bounds and self-consistent estimates for elastic constants of granular polycrystals composed of orthorhombics or crystal with higher symmetries. *Physical Review E*, 83, 046130; published online, DOI:10.1103/PhysRevE.83.046130. LBNL-4411E.
8. Billesbach, D.P. (2011), Estimating uncertainties in individual eddy covariance flux measurements: A comparison of methods and a proposed new method. *Agricultural & Forest Meteorology*, 151, 394-405.
9. Birkholzer, J.T., J.-P. Nicot, C.M. Oldenburg, Q. Zhou, S. Kraemer, and K.W. Bandilla (2011), Brine flow up a borehole caused by pressure perturbation from CO₂ storage: Static and dynamic evaluations. *International Journal of Greenhouse Gas Control* (in press). LBNL-4864E.
10. Bourg, I.C., and G. Sposito (2011), Molecular dynamics simulations of the electrical double layer on smectite surfaces contacting concentrated mixed electrolyte (NaCl-CaCl₂) solutions. *Journal of Colloid and Interface Science*, 360, 701–715. LBNL-4934E.

11. Bourg, I.C., and G. Sposito (2011), Ion exchange phenomena. In: *Handbook of Soil Science*, 2nd Edition, P.M. Huang, Y. Li, and M.E. Sumner, eds., Chapter B6, CRC Press, Boca Raton, FL. LBNL-4940E.
12. Brodie, E. L., D. C. Joyner, B. Faybushenko, M. E. Conrad, C. Rios-Velazquez, B. Mork, R. Kelley, A. Willet, S. Koenigsberg, D. Herman, M. K. Firestone, and T. C. Hazen (2011), Microbial community response to addition of polylactate compounds to stimulate hexavalent chromium reduction in groundwater. *Chemosphere* (in press). LBNL-4905E.
13. Buennning, N., D. C. Noone, J. T. Randerson, W. J. Riley, C. J. Still, and J. White (2011), Influences of the hydrological cycle on observed inter-annual variations in atmospheric CO¹⁸O. *Journal of Geophysical Research—Biogeosciences* (in press).
14. Cappa, F. and J. Rutqvist (2011), Modeling of coupled deformation and permeability evolution during fault reactivation induced by deep underground injection of CO₂. *International Journal of Greenhouse Gas Control*, published online, DOI:10.1016/j.ijggc.2010.08.005. LBNL-3855E.
15. Chakraborty, R., T.C. Hazen, D.C. Joyner, K. Kusel, M.E. Singer, J. Sitte, and T. Torok (2011), Use of immunomagnetic separation for the detection of *Desulfovibrio vulgaris* from environmental samples. *Journal of Microbiological Methods* (in press); published online, DOI:10.1016/j.mimet.2011.05.005. LBNL-4925E.
16. Chang, C-Y., J. C. H. Chiang, M. F. Wehner, A. Friedman, and R. Ruedy (2011), Sulfate aerosol control of tropical Atlantic climate over the 20th century. *Journal of Climate*, 24, 2540–2555; published online, DOI:10.1175/2010JCLI4065.1.
17. Chhabra, S.R., M.P. Joachimiak, C.J. Petzold, G.M. Zane, M.N. Price, S. Gaucher, S.A. Reveco, V. Fok, A.R. Johanson, T.S. Batt, M. Singer, J.M. Chandonia, D. Joyner, T.C. Hazen, A.P. Arkin, J.D. Wall, A.K. Singh, and J.D. Keasling (2011), Towards a rigorous network of protein-protein interactions of the model sulfate reducer *Desulfovibrio vulgaris* Hildenborough. *PLoS One*, 6(6), e21470. DOI:10.1371/journal.pone.0021470.
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